# **⊕EPA**

# Purchasing An Energy Star® Labeled Copier: A Buyer's Guide



The ENERGY STAR® Office Equipment Program is a partnership effort with the computer and office equipment industry to promote the introduction of energy-efficient personal computers, monitors, printers, fax machines, and copiers. Reducing energy consumption can help to combat smog, acid rain, and global warming by reducing emissions from electricity generation. By using more energy-efficient equipment in our homes, offices, and factories, we can improve the environment and save money.

If everyone bought ENERCY STAR labeled office equipment instead of conventional equipment, by 2010 the annual carbon dioxide (CO<sub>2</sub>) savings would be equivalent to taking over 2 million cars off the road.

#### What are ENERGY STAR Labeled Copiers?

ENERGY STAR® labeled copiers are just like conventional copiers except they have a feature that allows them to automatically shut off after a period of inactivity. This auto-off feature ensures that copiers are off at night and on weekends, when many units are sitting idle wasting energy. In addition, high-volume copiers are preset to automatically make double-sided copies. Beginning in mid 1997, manufacturers will introduce medium- and high-speed copiers with the ENERGY STAR label that also include a low-power mode for added energy savings during the workday.

ENERGY STAR compliant copiers will lower your electricity bills and paper supply costs while also preserving the environment.

EPA has signed partnership agreements with industry-leading copier manufacturers who produce more than 90 percent of the copiers sold in the United States. Consumers can easily identify these energy-efficient copiers by looking for the ENERGY STAR label.

ENERGY STAR Copier Guidelines (Through June 1997)

Copier Speed (copies per minute)	Off Mode (Watts)	Off Mode Default Time	Automatic Duplex Mode
0 < cpm ≤ 20	36	≤ 30 minutes	No
20 < cpm ≤ 44	< 40	≤ 60 minutes	Optional
> 44 cpm	≤ 40	≤ 90 minutes	Default

#### What's Next?

The next generation of mid- and high-volume ENERGY STAR labeled copiers will be able to enter a low-power mode (i.e., "go to sleep") during the workday and will consume no more than 15 or 20 watts (depending on copier speed) in off mode. These more energy-efficient features will allow users to further increase their energy and monetary savings. Buyers can expect these copiers to enter the marketplace in July 1997.

#### How to Find Energy STAR Compliant Copiers

Look for the ENERGY STAR label! On July 1, 1995, the first ENERGY STAR compliant copier models were introduced into the marketplace. Now, consumers can choose from more than 100 energy-efficient models from all major manufacturers. EPA is encouraging companies and organizations to establish a purchasing policy that specifies ENERGY STAR compliant office equipment, as long as it is cost effective and meets performance needs.



If you are a business, ask your MIS or procurement official about purchasing ENERGY STAR compliant copiers, and look for the ENERGY STAR label in advertisements and on specification sheets.



If you are a procurement official, ask your dealer or distributor about purchasing ENERGY STAR labeled copiers. (For sample procurement language, contact EPA.)



If you need a copier for home, look for the ENERGY STAR label on display models in local retail stores—if you don't see it, ask for it.

To help consumers find Energy Star labeled equipment, EPA offers a database listing of available products which is updated monthly. Just call toll-free 1-888-STAR-YES or write EPA to receive a copy.

# Which Energy Star Is Right for Me? Copy Volume

One of the most important factors to consider when choosing a copier is the copy volume. Purchasing a copier that is either too large or too small will create unnecessary waste. For instance, installing a high-volume copier in an office that only requires a mid-volume copier could result in the use of 70 percent more energy. On the other hand, a low-volume copier installed in a mid- to high-volume office may have reliability problems due to the extra heat created by making more copies. It may also use more toner and cartridges.



It takes 10 times more energy to produce a sheet of paper than to copy an image onto it.

#### **Double-Sided Copying**

Most of us know that making double-sided copies (duplexing) reduces the amount of paper sent into the waste stream. But did you know that it also decreases national energy consumption? The amount of energy necessary to produce paper significantly exceeds the energy used in copiers. So it's important to not only buy energy-efficient copiers, but to also choose copiers with duplexing capabilities. (High-volume copiers must have duplexing capabilities in order to qualify for the ENERGY STAR label.) If your mid-volume copier doesn't come standard with a duplexing unit, you can purchase one separately. While there is an up-front cost for the accessory, it can pay for itself in as little as two years.

About 3.5 million tons of copy paper (paper used in copiers, fax machines, and computer printers) are used in U.S. homes and offices every year at a cost of approximately \$3.5 billion. To supply this paper, greenhouse gases are released into the Earth's atmosphere during the various stages of the paper production process. We can decrease paper consumption, save money, and help prevent air pollution by making more double-sided copies.

# What Can I Do for My Existing Equipment?



Check with the manufacturer or the dealer to see if your copier has energy-saving modes. If it does, make sure they are turned on.



Ask the manufacturer or dealer to set the duplex mode as the default.



For maximum energy savings, make sure the copier is turned off at night and on weekends.



If you are leasing a copier, you may want to exchange the one you have for an ENERGY STAR compliant model.

#### Three Reasons to Buy ENERGY STAR



If all large copiers currently in use were ENERGY STAR compliant, their duplexing feature could save 1 million tons of paper (200 billion sheets) each year, which is enough to go around the world 1,400 times.

### What More Should I Know? Reliability

Consumers should find that duplexing does not significantly decrease the reliability of their copiers. According to Buyer's Lab, Inc., an independent lab that has been testing the reliability of copiers for over 30 years, duplexing is no longer a reliability issue in copiers. In fact, they only see jamming related to duplexing in a small percentage of the copiers they test. EPA recommends that buyers refer to independent lab tests to help them compare copier models and ensure the purchase of high-quality products.

#### Recycled Paper

Organizations can also help to reduce the flow of solid waste into landfills by using recycled paper in their copiers. The federal government is purchasing paper with a minimum of 20 percent post-consumer content. Paper with higher levels of recycled content may cause copier jams. Buyers should ask copier manufacturers for information on the type of recycled paper recommended for their machines.

#### **Weekly Timer**

In addition to the auto-off and low-power features, some Energy Star compliant copiers include a weekly timer. A weekly timer is an *optional* feature that allows users to preset the times when their copiers will automatically turn on and off. By using this feature, you can be sure that the copier is ready when you begin your day (e.g., the copier turns on at 9:00 a.m.) and that it is turned off at the end of the day (e.g., the copier shuts off at 6:00 p.m.). You can also program the copier to be off on weekends, holidays, and/or other days when your office is usually closed. Of course, if you need to make copies on a weekend, you can simply press the "Start" button to turn on the copier.

# Calculating Copier Costs<sup>1</sup>

Type of Copier	Annual Energy Costs <sup>a</sup>	Annual Paper Costs <sup>3</sup>	Annual Savings
60 cpm	5		SEIS
Conventional	\$224	\$2,250	-
ENERGY STAR	\$94	\$1,600	\$780

- A typical kilowatt hour rate is 8 cents; a sheet of paper costs about 0.5 cents.
- <sup>2</sup> Calculations are based on a 9.5 hour workday with no inactive time per day over a business year (250 days); 70 percent of copiers are assumed to be left on overnight (365 days).
- One-eighth of total copies (480,000 sheets) are assumed to be doubled-sided on conventional copiers; two-thirds of total copies are assumed to be doubled-sided on ENERGY STAR labeled copiers.



## ENERGY STAR Office Equipment Program

U.S. EPA (6202J) Washington, DC 20460

Toll-free in the United States: 1-888-STAR-YES (1-888-782-7937)

Outside of the United States: 202 775 6650

Internet

http://www.epa.gov/energystar.html

Fastine System: 202 233-9659

For information on other ENERGY STAR labeled products for your home and office, contact:

#### U.S. Environmental Protection Agency

1-888-STAR -YES (1-888-782-7937)

U.S. Department of Energy

1-800-DOE-EREC (1-800-363-3732)

# What to Specify When Ordering Copiers

#### **ENERGY STAR Compliant**

Provide copiers that meet the ENERGY STAR guidelines for energy efficiency. This means that low-, mid-, and high-volume copiers must be able to shut off after a specified period of inactivity. In addition, high-volume copiers shall be preset with the duplex mode as the default.

## **Quick Recovery Times**

Provide data on the time it takes for a copier to warm-up from the off mode. Consumers should compare the warm-up and recovery times of different copiers, particularly low- and mid-volume copiers, when making purchasing decisions. Some copiers also have a *low-power* mode, and consumers should compare the time it takes for different copiers to recover from this mode. A low-power or off mode with a quick recovery time will reduce the time a user must wait for the copier to begin functioning.

## **Duplexing Speed**

Provide a comparison of double-sided and single-sided copying speeds. Some mid- or high-volume copiers have duplexing (double-sided copying) speeds close to the single-sided copying speed. However, some are much slower and may affect the productivity of a copier.

# Copier Reliability

Provide information on the average time between failure, and the average time between service. Copiers that jam frequently create unnecessary waste. Asking about the jamming rate for double-sided copying will provide additional information on the performance of high-speed copiers Manufacturers may refer consumers to independent lab reports on the performance and reliability (including duplexing information, if available) of specific copier models.